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Indigenous environmental justice and sustainability

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A distinct formulation of Indigenous environmental justice (IEJ) is required in order to address the challenges of the ecological crisis as well the various forms of violence and injustices experienced specifically by Indigenous peoples. A distinct IEJ formulation must ground its foundations in Indigenous philosophies, ontologies, and epistemologies in order to reflect Indigenous conceptions of what constitutes justice. This approach calls into question the legitimacy and applicability of global and nationstate political and legal mechanisms, as these same states and international governing bodies continue to fail Indigenous peoples around the world. Not only do current global, national and local systems of governance and law fail Indigenous peoples, they fail all life. Indigenous peoples over the decades have presented a distinct diagnosis of the planetary ecological crisis evidenced in the observations shared as part of Indigenous environmental declarations.

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Introduction

A distinct formulation of Indigenous environmental justice (IEJ) is required in order to address the challenges of the ecological crisis as well the various forms of violence and injustices experienced specifically by Indigenous peoples. This must be grounded in Indigenous philosophies, ontologies, and epistemologies in order to reflect Indigenous conceptions of what constitutes justice [1–5,6••,7•]. In contrast to dominant Western society's tendency to view the natural world as a commodity, property or a 'resource', Indigenous understandings are based on regarding the Earth as alive and imbued with spirit. In this view, a reciprocal set of duties and responsibilities between humans and the rest of the natural world exists such that, assuming these obligations are consistently met, relations between human and non-human entities are maintained in a healthy balance [8••,9••,10].

This approach calls into question the legitimacy and applicability of global and nation-state political and legal mechanisms, as these same states and international governing bodies continue to fail Indigenous peoples around the world [11••,12]. Indigenous peoples' assessments of the world climate and environmental crisis, based on their own knowledge and understanding, have found global approaches thus far to be lacking [13,14•]. Not only do current global, national and local governance and legal systems fail Indigenous peoples, they fail all life [15]. Indigenous peoples over the decades have presented a distinct diagnosis of the planetary ecological crisis evidenced in the observations shared as part of numerous Indigenous environmental declarations since the Earth Summit in 1992 (including the following: *Kari-Oca Declaration*, *Kimberley Declaration*, *Indigenous Peoples Kyoto Water Declaration*, *Mandaluyong Declaration*, *Manaus Declaration*, *Kari-Oca 2 Declaration*, *Rio+20 International Conference of Indigenous Peoples on Self-Determination and Sustainable Development*, *Lima Declaration*) [16–23]. Increasingly, scientists from around the world have presented evidence that concurs with Indigenous peoples' analyses: the health of the planet is indeed failing [24].

The problem

Anthropocentric-induced climate change has been identified as the 'defining issue of our time' by many of the world's leading experts [25–27]. Given the severity and speed of the alterations in global climate, many are now preferring to use the term 'Climate Crisis', to stress the urgency with which we must act to achieve a sustainable future [28]. The Intergovernmental Panel on Climate Change states that world CO_2 emissions must be slashed to about half of 2010 levels, *in the next ten years*, and reach net-zero by 2050 [25]. The IPCC has further stated that limiting global warming to 1.5 °C would require rapid, far-reaching and unprecedented changes in all aspects of society [25]. Currently, we are we are nowhere near making that happen. In fact, annual CO_2 emissions continue to *rise*, by as much as 2.7% in 2018 [29].

And that is just climate change. The United Nations Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), released its global assessment report on biodiversity and ecosystem services in May 2019 and the findings are equally troubling. Particularly shocking is the conclusion that, " . . . around

1 million species already face extinction, many within decades . . . " unless radical changes are achieved in the immediate future [24]. The IPBES further iterates that, "Goals for . . . achieving sustainability cannot be met by current trajectories, and goals for 2030 and beyond may only be achieved through *transformative* changes across economic, social, political and technological factors" (IPBES 2019, 6, italics mine) [24]. The United Nations World Water Development Reports (2014–2019) [30–35] all reveal serious challenges ahead, globally, regionally and locally, in relation to climate change impacts on water security. By 2030, the world is projected to face a 40% global water deficit under the business-as-usual (BAU) scenario [31] and it is expected that climate change will exacerbate these conditions. In the absence of genuine efforts at supporting a sustainable future, the planet and its inhabitants (all life) is now in a multiple ecological, economic, and climatic crisis, including a crisis of values. The continued deterioration of the planet's health clearly demonstrates that current efforts at sustainability are inadequate.

Indigenous environmental justice: beyond the human dimension

Many, if not all, Indigenous peoples across the globe already have their own intellectual and legal traditions to draw upon to generate a self-determined future that involves living well with the Earth [3,4,10,36•,37••]. Yet global economic systems and their 'false solutions' aggressively undermine Indigenous peoples, in particular Indigenous women, in systemic, ongoing, and violent ways [38,39•]. It is therefore simply not rational for Indigenous peoples to rely on these global, national, and regional economic and political frameworks for climate justice and a sustainable future.

IEJ offers a distinct framework and set of logics that recognizes the agency of non-human beings as well as the Earth itself [40•,41]. For example, in the water justice literature, based on a Indigenous ontologies, water is understood to be a living entity with duties and obligations to ensure the well being of life, which is in direct contrast to water as a resource/property and commodity [7•,40•,41]. Water justice and security are not just about what people can access equitably, as reflected in the United Nations right to-water discourse, but justice for water as a living entity with rights and responsibilities of its own [8••].

IEJ is thus relevant beyond the human dimension, and it may well be that humanity alone does not possess the solutions required to save us from ourselves [42•]. Indigenous peoples assert that a just path to a sustainable future must consider *all relations*, an approach best expressed through Indigenous knowledge systems, legal orders, governance and conceptions of justice. These systems offer a diagnosis and path forward that answers the call for the 'transformative change' needed to alter global society's current trajectory. Indigenous knowledge can play a key role in such transformation and has been recognized as such for decades [1,43–47,48•].

IEJ and colonialism

International bodies including the United Nations have of course been seeking to address the ecological crisis. Yet resultant mitigation strategies (e.g., the 'green economy', REDD+, and the 'natural capital' approach) have been labeled by Indigenous peoples as 'false solutions' that have done little to alter the current course, as evident in the Indigenous declarations mentioned earlier. Alternate approaches are required. Indigenous conceptions of justice will enrich the theoretical grounding and practice of environmental justice through the inclusion of Indigenous legal orders, knowledges, principles and values.

Indigenous nations have engaged in their own diagnoses of the core issues and put forward their own solutions, as exemplified by Indigenous environmental or climate change declarations at international, national and local levels [49]. Such declarations offer anti-colonial critiques and insights as to the underlying sources of the global climate/ecological crisis. In the North American context, Indigenous peoples have arguably been concerned over ecosystem destruction since the arrival of Europeans over five centuries ago, long before dominant society officially recognized it as a crisis [10,50••]. From an Indigenous point of view, environmental injustices, including the climate crisis, are therefore inevitably tied to, and symptomatic of, ongoing processes of colonialism, dispossession, capitalism, imperialism/globalization and patriarchy.

Indigenous scholars confirm that we need to understand the current ecological crisis as an 'intensification of colonialism', and thus decolonization is required if any viable and sustainable path forward is to be envisioned [10,51,52]. Colonialism is generally understood to be one group/society assuming control of another society's territories and imposing its own systems of laws and governance. According to Kyle Whyte, settler colonialism is a form of colonization in which the colonizer decides to 'settle' in the other society's homeland and settlers seek to "erase Indigenous economies, cultures, and political organizations for the sake of establishing their own" [10]. Whyte continues that, in settler colonialism, a process that has occurred widely throughout the world, "the settlers' aspirations are to transform Indigenous homelands into settler homelands" [10]. Whyte further provides a settler colonialism analysis of the Dakota Access Pipeline environmental justice issue, which he sees as a highly disruptive type of injustice both embedded in history and confirmed through the existing laws, policies and governance processes of the colonizing state. Settler colonialism as an Indigenous environmental justice frame reveals that indeed it is no accident Indigenous

peoples are disproportionality impacted by environmental degradation as compared to other marginalized groups [6••,53,54]. Such a colonialism forms part of larger processes that prop up unsustainable and highly destructive agendas. Applying a settler colonial and environmental injustice analysis reveals deep-rooted historical forces at work in every facet of injustices experienced by Indigenous peoples [2,51,55–57]. Failure to apply an analysis of historical and on-going colonialism to understand the depth and scope of environmental injustices that are affecting Indigenous communities means remedies will continue to fail [10,58,59•,60]. The IPCC and IPBES reports, along with other assessments of planetary health, as useful as they are in calling for transformative change, have thus far fallen prey to this failure to fully consider the historical and ongoing colonialism context [10,50••, 58,59•]. As cultures who *do* fully understand the colonial context, having suffered centuries of direct impact from it, and who have for millennia practiced alternative approaches to living well with the earth, Indigenous peoples can help global society to see what the needed 'transformative' changes might look like.

An Indigenous environmental justice frame also provides a counter-narrative to the view that the experience of Indigenous peoples is that of simply 'victims' — the negatively impacted vulnerable population — common in international fora and scholarship. Scholarship such as Kyle Whyte's [10] challenges such a discourse, asserting that while indeed Indigenous peoples are vulnerable to such a large-scale disruption, they also possess experiences derived in part from their survival of historical and on-going imperialism, capitalism, and colonialism that have equipped them with knowledge of how to survive catastrophic environmental change. Indigenous peoples have adapted to and survived through such a change for centuries, and have utilized their own knowledge and legal orders to do so [10,61–63]. These long standing, unique and distinct dimensions of Indigenous peoples' experiences have thus far had limited impact on environmental, sustainability, and climate change policy internationally or nationally. Such an exclusion of the holistic experience and contributions of Indigenous can be considered another form of environmental injustice.

IEJ and well-being

Indigenous peoples have identified Indigenous knowledge and legal systems as central to supporting and enabling adaptive capacity, resilience and sustainability in the face of the climate crisis [12,64]. Much of the existing IEJ scholarship has pointed to the nature of the injustices, which has been incredibly important work to undertake. As Indigenous environmental justice declarations have pointed out for decades, however, decolonization is required to move toward a sustainable future, lest 'so-called solutions' further harm Indigenous peoples [14•]. In fact, as pointed out by Whyte, "colonialism is a form of anthropogenic climate change" [14•]. However, insufficient attention has thus far been directed towards how Indigenous knowledge and legal systems can be used to generate well-being and *Indigenous-determined* futures in the face of dramatic environmental and climatic change. In one perspective, there is no doubt that the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) and other human rights instruments have a role to play in seeking justice [65]. Yet the ontological and epistemological origins of these instruments differ from those of Indigenous peoples. How do Indigenous peoples *themselves* envision their future in the face of ongoing injustice and lack of vision around the called-for transformation?

As a prime example, Indigenous peoples have offered the vision of *buen vivir*, drawing on Indigenous intellectual and knowledge traditions, which calls for 'living well' within a community that extends to the natural world [12,36•,66]. 'Living well' with the Earth is a concept that conveys a deeper understanding of the relationships between human and non-human entities. *Buen vivir* "displaces the centrality of humans as the sole subject endowed with political representation and as the source of all valuation" [36•]. It confronts colonialism, patriarchy and the conceptual divide between humans and nature. *Buen vivir* has gained currency internationally and has been articulated as a fundamental element of a desirable future as expressed by Indigenous nations in the Rio+20 *International Conference of Indigenous Peoples on Self-Determination and Sustainable Development* [22]:

> Indigenous peoples call upon the world to return to dialogue and harmony with Mother Earth, and to adopt a new paradigm of civilization based on Buen Vivir — Living Well. In the spirit of humanity and our collective survival, dignity and well-being, we respectfully offer our cultural world views as an important foundation to collectively renew our relationships with each other and Mother Earth and to ensure Buen Vivir/living well proceeds with integrity.

Buen vivir as an alternative vision continues to develop, yet fundamentally recognizes the relational worldviews and the intrinsic value and agency of the non-human [67].

Other frames and logics that may assist with transformation include the 'rights of nature', 'legal personhood', Earth Jurisprudence and Earth Centered Law discourses, which extend conventional notions of environmental justice and sustainable futures to a narrative that considers or is inclusive of non-human entities [68]. An emphasis on Earth Centered law demonstrates innovation, based perhaps in part on, or informed by, Indigenous world views [8••,69]. These profound life philosophies are evident in the *Universal Declaration on the Rights of Mother Earth* and the constitutional recognition of the rights of

nature of both Bolivia and Ecuador [70]. 'Rights of nature' approaches to justice for all relations recognize that "all aspects of nature are legal subjects that have inherent rights, and [we] must uphold those rights" [71]. In response, the United Nations adopted a resolution in 2018 on 'Harmony with Nature', that recognizes earth jurisprudence, the rights of nature, albeit in a limited form, confining the recognition to existing sustainable development goals [72,73]. These approaches challenge the status quo ideas of modernity, capitalism, patriarchy, and consumerism that arise from the view that humans are separate from nature. The rights of nature discourse instead views humans as another aspect of the living Earth. Alternate laws, knowledges, legal and governance structures at every level and scale are required if we, as humanity, are to live well with the Earth and support the continuance of life. Existing Indigenous systems of understanding offer living examples and insights into the development of such sustainable alternatives.

To achieve environmental justice, the voices of Indigenous peoples and their stated numerous recommendations for a sustainable future must be heeded at every level. Unfortunately, Indigenous voices remain on the margins in global discussions on the collective future of humanity and the planet. One mechanism that could serve at least as a minimum starting point in resolving this situation is global implementation of the *United Nations Declaration on the Rights of Indigenous Peoples*.

Conflict of interest statement

Nothing declared.

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